

REMARKS

Status of Claims

Claims 1-14 are pending in this application.

Claim Objections

Applicant acknowledges with appreciation the indication in the Office Action that claims 3 and 10 would be allowable if rewritten to overcome the minor informality noted with respect to claim 3. Regarding this indication, Applicant respectfully submits that the antecedent basis in the instant amendment for the “carrier sense signals” in claim 3, line 16 and line 19, exists in line 11. As such, Applicant submits that claim 3, as previously amended, and claim 10, which is dependent upon claim 3, are allowable.

Applicant acknowledges with appreciation the suggestion in the Office Action that claim 7, line 1, be modified to overcome the noted informality. Applicant has amended claim 7, line 1, replacing “An equalizing method A circuit according to” with “An equalizing method according to.”

Allowed Claims

Applicant notes with appreciation the indication in the Office Action that claims 4 and 11 are allowed. These claims are unchanged.

Rejections Under § 103(a)

The Office Action rejects claims 1-2 and 6-7 under 35 U.S.C. § 103(a) as being unpatentable over Kobayashi et al., U.S. Patent No. 6,229,950 B1, in view of Kusumi et al., U.S. Patent No. 6,252,630 B1. The Office Action also rejects claims 5 and 12 under § 103(a) based on Kobayashi and Kusumi, further in view of Fudawa et al., U.S. Patent No. 5,710,792. The Office Action also rejects claims 8 and 9 under § 103(a) based on Kobayashi and Kusumi, in view of Kaku et al., U.S. Patent No. 6,002,724. Lastly, the Office Action rejects claims 13 and 14 under § 103(a) based on Kobayashi, Kusumi and Kaku, further in view of

Fudawa. These rejections are respectfully traversed.

The Office Action alleges that Kobayashi discloses all features of the original independent claims except for sensing the start of a reception signal on the basis of a signal representing a reception level of the reception signal. Further, the Office Action alleges that Kusumi teaches a carrier sensing means (2 FIG. 1) for sensing the reception level of the reception signal.

In order to better differentiate Applicant's rejected independent claims 1, 6 and 8 over the prior art, these claims have been amended to recite the concepts of: simultaneous feeding of the reception signal to first and second equalizing means; generation of first and second carrier sense signals by a carrier sense controller; and the gating of a clock signal by first and second gate circuits. For example, claim 1 has been amended to recite that the reception signal is "simultaneously fed" to both the first and second equalizing means. In addition, claim 1 recites that the "control means" includes "a carrier sense controller for generating first and second carrier sense signals and first and second gate circuits receiving said first and second carrier sense signals respectively, each of said first and second gate circuits receiving a clock signal." This arrangement facilitates the processing of a reception signal that carries a short inactive interval.

Claims 6 and 8 have been amended in a similar fashion as claim 1, but utilizing method terminology.

In contrast, Kobayashi discloses an arrangement in which, at any given time, the signal output by reproduction equalizer 5 is fed to either equalizer 7 or equalizer 8 but never both simultaneously. Whether the signal is fed to equalizer 7 or equalizer 8 is determined by the configuration of switch 6, which is driven solely by the head switch pulse signal SWP. This SWP signal is supplied from the head switch pulse forming circuit 14, which uses the rotation phase signal PG. In column 10, lines 25-30, it is stated that the phase signal PG indicates the rotation phase of the rotary drum D shown in FIG. 1. Further, it does not appear that the configuration of switch 6 is at all affected by the operation of CPU 17 and D/A 18. Rather, column 5, lines 5-14, indicate that: (1) "CPU 17 is arranged to vary the coefficient K

of the multiplier 105 in such a way as to optimize the characteristics of the equalizers 7 and 8” and (2) D/A 18 merely converts the digital coefficient produced by CPU 17 into an analog value suitable for use by equalizer 7.

Reflecting these different focuses, Kobayashi lacks several features recited in claim 1 (and claim 6). As stated in the Office Action, Kobayashi does not explicitly specify a means for sensing the start of a reception signal on the basis of a signal representing a reception level of the reception signal. Additionally, Kobayashi lacks “control means for alternately enabling said first and second equalizing means every frame reception in accordance with said detection signal output from said carrier sensing means, said control means including a carrier sense controller for generating first and second carrier sense signals and first and second gate circuits receiving said first and second carrier sense signals respectively, each of said first and second gate circuits receiving a clock signal.” The Office Action alleges that switch 6, CPU 17 and D/A 18 constitute a “control means for alternately enabling the first and second equalizing means every frame reception.” However, switch 6 merely directs the feeding of the signal from the output of reproduction equalizer 5 to the input of either equalizer 7 or equalizer 8. Thus, switch 6 does not enable the operation of the equalizers. CPU 17 and D/A 18 also do not enable the operation of the equalizers; instead, these two units effectively produce an analog coefficient that is supplied to the equalizers in order to optimize the equalizing characteristics. Since it is conceded that Kobayashi lacks means for sensing the start of a reception signal as provided in claim 1 of the present application, Applicant submits that it cannot be maintained that switch 6, CPU 17 and D/A 18 constitute a control means for alternately enabling said first and second equalizing means every frame reception in accordance with said detection signal output from said carrier sensing means, said control means including a carrier sense controller for generating first and second carrier sense signals and first and second gate circuits receiving said first and second carrier sense signals respectively, each of said first and second gate circuits receiving a clock signal.

Claims 2 and 7 are deemed to be patentable since they depend from claims 1 and 6 respectively.

The Office Action relies on Kusumi as disclosing the carrier sensing means for sensing the reception of a signal based on its reception level. Even accepting this view, however, the isolated teaching of such detection fails to teach, describe or suggest the other features of the invention, noted above, that are absent from Kobayashi. Accordingly, the cited combination fails to establish a *prima facie* case of obviousness. Withdrawal of the rejection of claims 1, 6, 2 and 7 is therefore respectfully requested.

The remaining secondary references do not cure the basic deficiencies of Kobayashi with respect to Applicant's amended claims. As such, the PTO has not made out a *prima facie* case of obviousness as to Applicant's independent claims or claims dependent there from.

Conclusion

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of

papers submitted herewith, applicant hereby petitions for such extension under 37 C.F.R.
§1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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